

ABSTRACT

The present invention relates to monitoring and controlling a reticle fabrication process (*e.g.* employed with an electron beam lithography process). A typical fabrication process involves discrete stages including exposure, post-exposure bake and development. After fabrication is complete, an inspection can be performed on the reticle to determine whether any parameters during fabrication and/or any data points are outside of acceptable tolerances. The data is collected and fed into an algorithm (*e.g.* data-mining algorithm) utilized to determine which fabrication parameters need to be modified then sends the data to a control system (*e.g.* advanced process control) to facilitate needed changes to the fabrication parameters.